

# Spotters stay ahead of the weather

## Amateur radio operators help guide alerts

THE ASSOCIATED PRESS

OSHKOSH — Retired Outagamie County Sheriff's Detective William Drootsan was riding with a friend through the countryside near his Conover summer home last July 30 when dark clouds ushered in a line of severe thunderstorms packing winds later estimated at 100 mph.

The pair listened to the ham radio in their vehicle crackle with constant reports from trained weather spotters monitoring the storm's progress and the damage it caused.

Two people died, 200 homes were damaged and more than 100,000 trees were destroyed in several northern Wisconsin counties in that storm.

It left a lasting impression on Drootsan, who experienced a number of severe weather events in his career as a law-enforcement officer.

"When I heard those ham radio operators get together and start watching the storms I was very impressed. I was so impressed I went out and earned my ham radio technician's license and bought a ham radio," said Drootsan, who joined the ARES and RACES amateur radio groups in the Fox Valley.

Drootsan, who now lives in Menasha, was one of about four dozen Winnebago County residents who attended last week's severe-weather-spotter training at the Experimental Aircraft Association AirVenture Museum in Oshkosh.

Another training session is scheduled for 6:30 p.m. Monday at the Outagamie County Administration Building in Appleton.

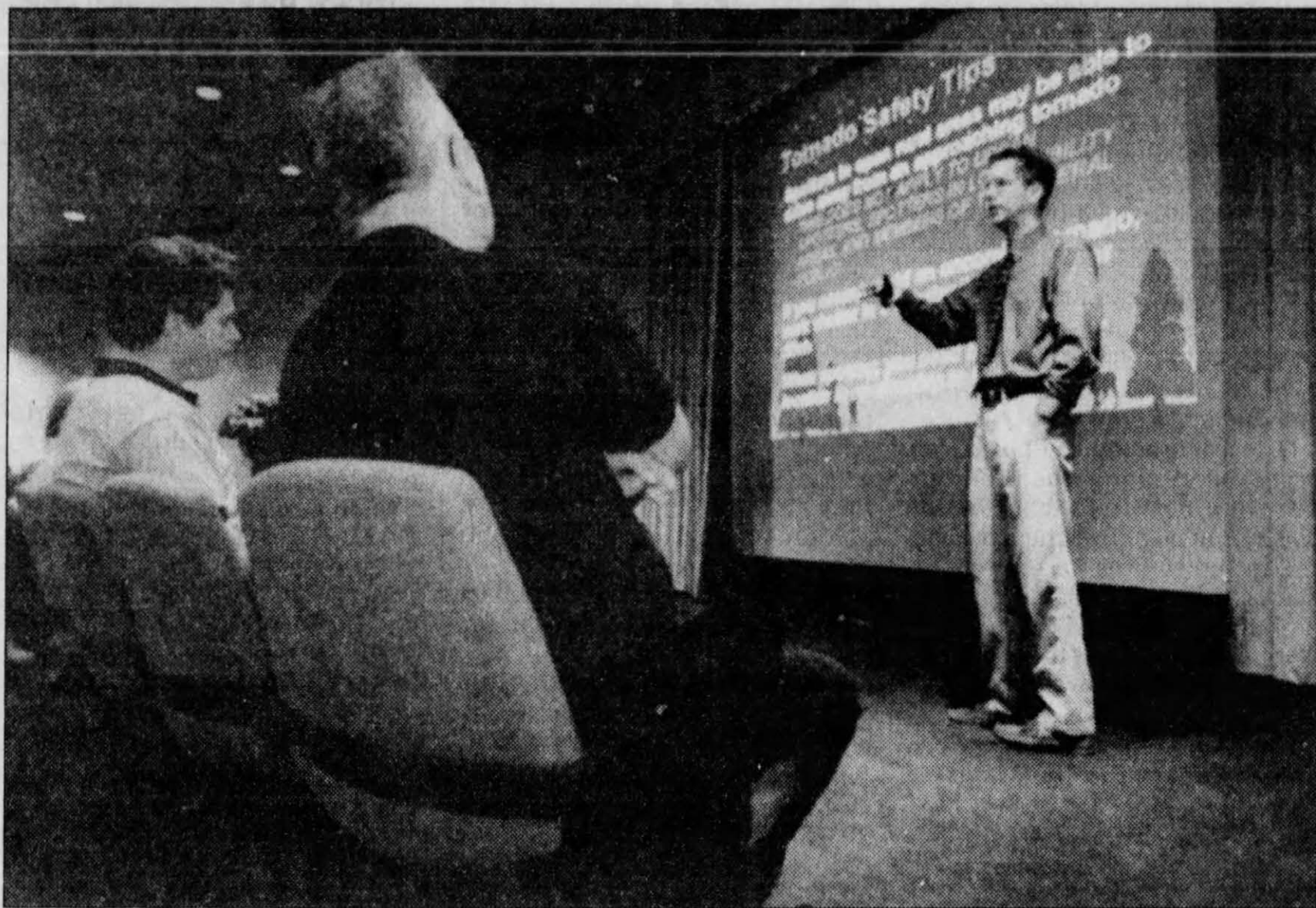
All the training sessions are sponsored by the National Weather Service office in Ashwaubenon.

Jeff Last, warning coordination meteorologist for the office, said that despite the continual evolution of weather-monitoring technology, the human eye remains a critical element in the issuance of storm warnings.

Last said Doppler radar technology allows meteorologists to scan the mid and high levels of a storm.

"But we need spotters to tell us what is happening on the ground. We are always going to rely on the eyes and ears of the weather spotters," Last said.

Last said there are about 800 weather spotters in the Ash-



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Jeff Last, meteorologist with the National Weather Service in Ashwaubenon, covers tornado safety tips Wednesday during a severe-weather-spotters training session at the EAA Museum in Oshkosh. Severe-weather spotters are a key part of tracking tornadoes and other dangerous storms.

waubenon office coverage area, which includes 22 counties and part of Lake Michigan encompassing a population of more than 1 million people. Statewide, Last said, there are more than 2,000 trained weather spotters.

The work of the weather spotters helps meteorologists in deciding whether to issue a severe weather watch or warning. Watches are issued two to six hours before an area is expected to be exposed to severe weather. A warning is typically issued an hour before a storm strikes.

Last said the false-alarm ratio in issuing tornado warnings has increased.

"We are seeing cloud rotations on radar that we didn't see before Doppler. But it is a new science," he said. "Yes. Our cry wolf is high, but it is going down as we understand the science of the tornado."

During the training session, Last instructed weather spotters on the best angle from which to observe a storm, pointed out features of a towering storm that indicate the presence of severe weather and stressed the safety factor in spotting, including having an escape route if a storm suddenly changes direction.

Last said storms containing tornadoes, for example, are known to dip to the south shortly before the

funnel cloud emerges from the storm.

There were 159 severe weather warnings issued in 1999, Last said, 74 less than the record of 233 issued in 1998.

The 1999 storms produced two weak tornadoes, including one that struck Door County.

The most damaging storms involved flash flooding in Florence County on July 15 and the wind storm through which Drootsan drove on July 30.

Last said weather spotters not only look for tornadoes, but hailstorms, storms carrying damaging straight-line winds and heavy rains.